

CLAIMS

What is claimed is:

- A method of noise attenuation comprising the steps of:
 generating a noise canceling signal;
 sensing for a system condition; and
 ceasing the generation of the noise canceling signal based upon the system
 condition.
- 2. The method of claim 1 wherein the system condition relates to engine noise.
- 3. The method of claim 1 wherein the system condition relates to background sound.
- 4. The method of claim 1 wherein the system condition relates to the relationship between engine noise and background sound.
- 5. The method of claim 1 wherein the system condition relates to throttle position.
- 6. The method of claim 1 further including the step of sensing for a change in the system condition.
- 7. The method of claim 6 further including the step of generating the noise canceling signal when the change in system condition is sensed.
- 8. The method of claim 1 further including the step of recording the ceasing of the generation of the noise canceling signal based upon the system condition.
- 9. The method of claim 8 further including the step of ceasing the generation of the noise canceling signal when the number of recordings exceed a preset level.

- 10. The method of claim 9 further including the step of issuing an error message.
- 11. The method of claim 9 further including the step of waiting a set period of time before sensing for the system condition and generating the noise canceling signal.



12. A method of noise attenuation comprising the steps of: generating a noise canceling signal; sensing for an system condition; and

ceasing the generation of the noise canceling signal based upon the system condition wherein the system condition relates to the relationship between engine noise and background sound.

- 13. The method of claim 12 wherein the system condition relates to throttle position.
- 14. The method of claim 12 further including the step of sensing for a change in the system condition.
- 15. The method of claim 14 further including the step of generating the noise canceling signal when the change in system condition is sensed.
- 16. The method of claim 12 further including the step of recording the ceasing of the generation of the noise canceling signal based upon the system condition.



17. An air induction system comprising:

an air induction body;

a speaker in proximity to said air induction body;

at least one sensor for sensing an system condition; and

a control unit with a noise cancellation feature in communication with said speaker and said sensor wherein said control unit disables said noise cancellation feature based upon said system condition.

- 18. The air induction system of claim 17 wherein said predetermined system condition is based on engine noise level received by said microphone.
- 19. The air induction system of claim 17 wherein said predetermined system condition is based on background noise level received by said microphone.
- 20. The air induction system of claim 17 wherein said predetermined system condition is based on a relationship between engine noise level and background noise level.